



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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801-538-5340

December 3, 1991

Mr. Danny Gray, President
KBK Enterprises, Inc.
1000 Cobb Place Blvd., Bldg. 400
Kennesaw, Georgia 30144

Dear Mr. Gray:

Re: Approval of Permit Amendment, Reclamation of Areas #1 & 2, Marblehead Mountain Lime Facility, Material Energy Research and Recovery Corporation (MERR), M/045/024, Tooele County, Utah

The Division has completed its review of your latest revised submission received October 2, 1991, which addresses plans for reclamation of Areas #1 & 2 at the Marblehead Mountain Lime Facility. The revised plan addresses the Division's previous concerns and request for supplemental information. The Division hereby issues its approval of the reclamation proposal with the following conditions:

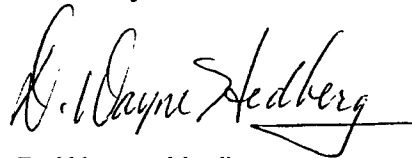
1. After evaluating the laboratory analytical results of the substitute soil medium (fines) to be used for reclamation, the Division recommends that the native hay mulch be increased to 3500 - 4000 lbs/acre. Without this type of amendment, there will likely be a problem with water holding capacity, poor physical properties and nutrient content in this soil medium.
2. The laboratory analyses of the limestone fines/substitute soil material indicates a marginal/low plant nutrient level. The Division recommends that additional soil amendments be added in the form of an ammonium sulfate (NH_4SO_4) type fertilizer, containing the NPK ratio of 40-20-10. The broadcast fertilizer rate should be 200 lb/ac. The fertilizer should be applied prior to seeding and scarification.
3. The Division requests a certified laboratory analysis of the "typical" kiln scale material that is periodically removed from the roasting kiln. This material is proposed to be buried on site as outlined in the plan amendment. The Division needs to be assured that burial of this material will not cause detrimental impacts to the local environment (air, soil or water resources).

4. The Division requests a laboratory analysis of the "typical/representative" overburden and processing waste material, presently being covered as a result of the regrading and reclamation activities proposed in this amendment. It is our understanding that historically, this material contained waste iron ore, coal residue, limestone/dolomite fines and other associated processing and operational waste materials. Again, this request is to document and assure that there will be no negative environmental consequences as a result of burial of this material.
5. During our November 26, 1991, onsite inspection, Division staff advised plant personnel that we would like to see some contour trenching/terracing incorporated into the final regrading plan for the steeper outcrops, thereby minimizing erosion potential.
6. Also discussed during the inspection was our concern with probable grazing-related impacts from livestock to the revegetated/reclaimed areas. We indicated that the operator should provide for temporary fencing during the critical plant establishment period (@2 yrs.). Alternatively, the operator may choose not to fence initially and wait to see what the grazing impacts may be to the reclaimed areas. Should uncontrolled grazing prove detrimental to the revegetated areas, then the Division will require reseeding and fencing until the site is stabilized and the vegetation is firmly established. We request that the operator notify us accordingly of its decision/preference in this regard.
7. Also evaluated during our November 26th inspection was the vegetation test plot area adjacent to the quarry. The Division is concerned that the operator has failed to address our previous concern regarding the inadequacy of the fencing surrounding the test plot. We are uncertain as to the agreement between Marblehead Lime Company and USPCI, d.b.a. MERR, regarding proper maintenance and upkeep of this test plot. Therefore, we hereby establish a deadline of April 1, 1992, to implement the fencing requirements as outlined in our August 6, 1991 letter.
8. Based on our November 26, 1991 inspection of the plants established in the test plots, we would like to alter the recommended species list described in our August 6, 1991 letter. Please refer to the attached species list.

Page 3
Mr. Danny Gray
M/045/024
December 3, 1991

The Division appreciates the opportunity to review and comment on this reclamation proposal and supports the operator's foresight in conducting this contemporaneous reclamation of the idled areas at the Marblehead Mountain Lime Facility. Please contact me or Holland Shepherd of the Minerals staff if you have any concerns or questions regarding the content of this letter.

Sincerely,

A handwritten signature in cursive script, reading "D. Wayne Hedberg". The signature is written in dark ink and includes a horizontal line extending from the end of the name.

D. Wayne Hedberg
Permit Supervisor
Minerals Regulatory Program

jb
Attachment
cc: Jack Minchey, MERR, Marblehead Plant
Philip N. Raines, Marblehead Lime
Lowell Braxton, DOGM
M045024.1

Recommended Species List
for
**Marblehead Mountain
Limestone Processing Facility**

M/045/024

Prepared by DOGM 12/3/91

<u>Common Name</u>	<u>Species Name</u>	<u>*Rate lbs/ac (PLS)</u>
<u>Grasses</u>		
Bluebunch wheatgrass	Agropyron spicatum	2
Western wheatgrass	Agropyron smithii	2
Indian ricegrass	Oryzopsis hymenoides	2
Sand dropseed	Sporobolus crytandrus	.5
Crested wheatgrass	Agropyron cristatum	2
<u>Forbs (high crest)</u>		
Desert Globemallow	Sphaeralcea grossulariaefolia	2
Yellow sweetclover	Melilotus officinalis	2
Palmer penstemon	Penstemon palmeri	1
<u>Shrubs</u>		
Fourwing saltbush	Atriplex canescens	2
Rabbitbrush	Chrysothamnus nauseous	2
Winterfat	Eurotia lanata	2
Total		19.5 lbs/ac

*This is the recommended broadcast ratio. If the species are to be drill seeded, reduce the broadcast rate by 1/3.